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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/558,293	04/25/2000	Mrudula Kanuri	95-343	9755
20736	7590	09/12/2005	EXAMINER	
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307			HARPER, KEVIN C	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/558,293	KANURI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin C. Harper	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 April 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 and 14-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6,8,9,14-19 and 22-24 is/are rejected.
- 7) Claim(s) 7,10,11,20,21 and 25 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                         |                                                                             |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.                                               |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                         | 6) <input type="checkbox"/> Other: _____.                                   |

***Response to Arguments***

Applicant's arguments filed April 24, 2005 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hegde in view of Hariguchi.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegde (US 6,876,654) in view of Hariguchi et al. (US 6,665,297).

1. Regarding claims 1-3 and 14, Hegde discloses a method in an integrated network switch having a switching module (fig. 2) for switching a layer 2 packet (col. 4, lines 48-50). The method comprises determining whether the layer 2 packet includes layer 3 packet information (fig. 6, steps S10 and S20; col. 9, lines 49-54; col. 10, lines 1-7), selectively performing layer 3 switching based on the determined presence of layer 3 packet information based on a layer 3 destination address having a subnetwork identifier and selectively performing layer 2 switching based on the determined absence of the prescribed layer 3 packet information (fig. 6, step S60). Further regarding claim 14, the network switch includes an evaluation module, an address table, and an output module (fig. 3).

2. However, Hegde does not disclose first and second tables as claimed. Hariguchi discloses performing layer 3 switching by searching for a destination IP address in a first table having IP addresses (col. 2, lines 12-14 and 17-20) and searching a second table having subnetwork identifiers when no corresponding switching entry is found in the first table (col. 2,

lines 14-16 and 20-26; col. 1, lines 45-20). Further regarding claim 14, the device of Hariguchi includes an address lookup module (col. 2, lines 3-5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to search first and second tables in the invention of Hegde in order to find a proper outgoing route to a destination (col. 1, lines 51-56; col. 2, lines 3-9).

3. Regarding claim 22, in Hegde a new MAC address is given which is associated with a router and based on the IP information in the header (col. 9, lines 63-67).

Claims 4-6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegde in view of Hariguchi, as applied to claims 3 or 14 above, in further view of Yoshida et al. (US 5,987,524).

4. Regarding claims 4-6 and 15, Hegde in view of Hariguchi does not disclose comparing a source address with a table for storing subnetwork identifiers. Yoshida discloses a rules queue for generating status information and an ingress module verifying source IP and MAC addresses with addresses in a routing table and discarding packets with unidentified source IP and MAC addresses (Figure 8, step S51; col. 10, lines 10-22). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to verify the source IP address of a packet in the invention of Hegde in view of Hariguchi in order to provide access to authorized customers.

Claims 8-9 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegde in view of Hariguchi, as applied to claims 3 or 14 above, in further view of Tappan (US 5,991,300).

5. Regarding claims 8-9 and 16-17, Hegde in view of Hariguchi does not disclose dropping a packet when a TTL reaches zero or decrementing the TTL field prior to outputting a layer 2

packet. However, Tappan discloses both these features (col. 3, lines 38-41). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to decrement the TTL field in a packet or drop a packet when the TTL field reaches zero in the invention of Hegde in view of Hariguchi in order to prevent a packet from having excessive delay or being forwarded in a continual loop.

6. Regarding claim 18, the limitations of this claim are addressed in the rejection of claim 15.

7. Regarding claim 19, the limitations of this claim are addressed in the rejection of claims 14-15.

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegde in view of Hariguchi, as applied to claim 1 above, in further view of Kadambi et al. (US 2001/0012294).

8. Regarding claims 23-24, Hegde discloses a switch for performing layer 2 and layer 3 switching. However, Hegde in view of Hariguchi does not disclose that the brouter is implemented as an integrated network switch on a single integrated chip. Kadambi discloses a layer 2 and layer 3 switch that is integrated on a chip (Figures 1-2; para. 7 and para. 150, last 10 lines). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have switching functions integrated on a single chip in the invention of Hegde in view of Hariguchi in order to reduce the cost and complexity of network switching nodes (Kadambi, para 33, lines 17-31).

***Allowable Subject Matter***

9. Claims 7, 10-11, 20-21 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

September 6, 2005